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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| EXAMINER | |
|---|---|
| NGUYEN, VAN H | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2126 | |

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/489,676 | MERIC ET AL. | |
| | Examiner | Art Unit | |
| | VAN H NGUYEN | 2126 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-33,35-40 and 47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33,35-40 and 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/10/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 1-33, 35-40, and 47 are presented for examination.

### *Claim Rejections - 35 USC § 103*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-33, 35-40, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Haroun et al.** (U.S. 5, 787,259).

4. **As to claim 1,** Haroun teaches the invention substantially as claimed including a method of communicating data, via a device driver, between an application and an interface having a feature to which an interface identifier is assigned, the assignment of the interface identifier to the feature being susceptible to change after an event *(see the abstract and fig. 1)*, the method comprising:

- storing a logical identifier corresponding to the feature *(col.8, lines 39-col.9, line 35);*and

- maintaining correspondence between the logical identifier and the feature independently of the interface identifier assigned to the feature so that communication between the application and the device driver directed using the logical identifier remains associated with the feature

following a change in the assignment of the interface identifier to the feature *(fig.6 and associated text in col.9, line 36-col.10, line 41).*

While Haroun teaches storing a logical identifier corresponding to the feature, Haroun does not specifically teach the use of the logical identifier to direct communication associated with the feature.

It would have been obvious to one of ordinary skill in the art to have applied the teachings of Haroun to include the features as claimed because Haroun's teachings would have provided the capability for efficiently transmitting commands and data between the data processing system and the consumer electronics devices.

The fact that Haroun's teachings " In addition to identifying the parameters to be controlled, the minidriver provides the operating system with information that permits the operating system or applications software to control those parameters. This information may take the form of a string table that contains all of the commands necessary to control the device. The applications or operating system software may control the operating parameters of the device using commands provided in the string table. Each string in the string table includes a string *identifier*. The string identifier has a standard format that includes the identity of the device, the type of device" (col.8, lines 39-60) suggest the use of the logical identifier to direct communication associated with the feature.

5. **As to claim 2,** Haroun teaches communication between the interface and the device driver is directed based on the interface identifier *(col.8, line 39-col.9, line 35).*

6. **As to claim 3,** Haroun teaches compiling a list of logical identifiers and corresponding interface identifiers for the feature if the feature meets a pre-determined criterion *(col.8, lines 47-65).*

7. **As to claim 4,** Haroun teaches the device driver is arranged to communicate the interface identifier assigned to the logical identifier to the application on request *(col.8, line 39-col.9, line 35).*

8. **As to claim 5,** Haroun teaches the device driver is arranged to accept requests from the application to define connections between physical devices connected to a bus using the logical identifier in place of the interface identifier *(fig.6 and associated text incol.9, line 36-col.10, line 41).*

9. **As to claim 6,** Haroun teaches the application is arranged to communicate with the device driver via device manager means *(col.9, lines 36-61).*

10. **As to claim 7,** Haroun teaches the feature of the interface comprises a peripheral connected to the interface and the interface identifier comprises a physical address assigned to that peripheral, the logical identifier comprising a logical address assigned to the peripheral *(fig.1; col.4, lines 5-30; and col.9, lines 15-24).*

11. **As to claim 8,** Haroun teaches maintaining correspondence includes interrogating the peripheral to which the logical address is assigned to determine the physical address assigned to the peripheral following a bus reset *(col.10, lines 5-41).*

12. **As to claim 9,** Haroun teaches the device driver is arranged to communicate the interface identifier assigned to a logical identifier to the application on request, and further comprising communicating the interface identifier for the peripheral by communicating the physical address

of the peripheral and communicating a unique node identifier containing further information identifying the peripheral *(fig.6 and associated text incol.9, line 36-col.10, line 41).*

13. **As to claim 10,** Haroun teaches the feature of the interface comprises a channel of defined parameters available via the interface and the interface identifier comprises an interface channel number, the logical identifier comprising a logical channel identifier *(col.8, lines 11-34 and col.9, lines 44-61).*

14. **As to claim 11,** Haroun teaches the device driver is arranged to receive a request from the application to allocate the channel of defined parameters and to return the logical channel identifier if allocation is successful *(col.8, lines 11-34 and col.9, lines 44-61).*

15. **As to claim 12,** Haroun teaches the device driver is arranged to accept a preferred interface channel number and to allocate a preferred interface channel if available, and to allocate a free channel if the preferred interface channel is not available or if the preferred interface channel is not specified *(col.9, lines 25-61).*

16. **As to claim 13,** Haroun teaches the device driver is arranged to receive an identifier of a preferred interface channel, to recognise a predetermined key in place of a valid interface channel number as indicating that the preferred interface channel is not specified, and to report an error to the application if other invalid interface channel numbers are specified *(col.8, line 66-col.9, line 24).*

17. **As to claim 14,** Haroun teaches the device driver is arranged to communicate the interface channel number to the application, and at least one other parameter selected from: a maximum rate allocated to the channel; a rate currently available; a number of connections using

the channel; and identifiers of each connection using the channel *(col.2, lines 18-27 and col.4, lines 5-17).*

18. **As to claim 15,** Haroun teaches the device driver is arranged to accept requests from the application to define one or more connections between physical devices attached to the interface by reference to logical addresses and logical channel identifiers *(fig.6 and associated text in col.9, line 36-col.10, line 41).*

19. **As to claim 16,** Haroun teaches the device driver is arranged to establish at least a broadcast connection *(fig.1 and associated text in col.4, lines 5-60).*

20. **As to claim 17,** Haroun teaches the device driver is arranged to signal the event to the application, the event including reset of a bus or a change in a bus topology or a change in a channel or a change in connection parameters *(col.8, lines 39-60 and col.10, lines 5-41).*

21. **As to claim 18,** note the rejection of claims 1 above. Claim 18 is the same as claim 1, except claim 18 is a device driver claim and claim 1 is a method claim.

22. **As to claim 19,** Haroun teaches the device driver is implemented in software *(col.5, lines 2-6).*

23. **As to claims 20-33,** note the rejection of claims 3-5, 7-17 above. Claims 20-33 are the same as claims 3-5, 7-17, except claims 20-33 are device driver claims and claims 3-5, 7-17 are method claims.

24. **As to claim 47,** note the rejection of claims 1 above. Claim 47 is the same as claim 1, except claim 47 is a data processing system claim and claim 1 is a method claim.

25. **As to claim 35,** Haroun teaches means for receiving broadcast data, the interface means being arranged for connection to a digital video recorder or a digital display device or a computer

for display or storage of at least a portion of the received data *(fig. 1 and associated text in col. 4, lines 5-60).*

26. **As to claim 36,** Haroun teaches the device driver means is arranged to cooperate with further device driver means for modifying the broadcast data to produce a modified data stream for passing to the interface means *(col. 8, lines 11-19).*

27. **As to claim 37,** Haroun teaches the interface means conforms to an IEEE 1394 standard or a variant thereof *(fig. 1; col. 4, lines 7-8; and col. 5, lines 47-48).*

28. **As to claim 38,** Haroun teaches the application is run in an interpreted language and the device driver means is compiled *(fig. 6 and associated text incol. 9, line 36-col. 10, line 41).*

29. **As to claim 39,** Haroun teaches the device driver means is arranged to transmit commands for controlling the digital video recorder from the application and/or to receive data concerning the information stored on the digital video recorder *(fig. 1 and associated text in col. 4, lines 5-60).*

30. **As to claim 40,** Haroun teaches the data is in a MPEG format *(col. 5, lines 33-45).*

## ***Response to Arguments***

31. Applicant's arguments filed June 10, 2004 have been fully considered but they are not persuasive.

32. In the remarks, Applicant argued in substance that (1) Haroun does not disclose, teach, or suggest that the interface identifier may change after an assignment (2) regarding the first

element of claim 1...this has nothing to do with the storage of logical identifiers for internal use (3) regarding the third element of claim 1...this is completely different from communicating between an application and an internal device driver using the logical identifier (4) regarding the second element of claim 1... it is incorrect to compare this feature with the information in Haroun about the parameters to be controlled.

33. Examiner respectfully traverses Applicant's remarks:

A. As to point (1), it is noted that in claim 1 the recitation "the assignment of the interface identifier to the feature being susceptible to change after an event" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). However, fig. 1 shows that to control (i.e., send a command) different devices connected to the computer 15, interface identifiers corresponding to each of the devices are stored; and the assignment of the interface identifier will be changed each time the computer 15 sends a command to a device (i.e., a video cassette recorder, a compact disk player, a television, etc.). Therefore, the teachings meet the limitations as claimed in new claim 47.

B. As to point (2), it is noted that claim 1 is claiming " *a logical identifier*", not "*logical identifiers*"; and "internal" is not claimed. Claimed subject matter, not the specification is the

measure of the invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. See In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11, 15 (CCPA 1978). The Examiner has a *duty* and *responsibility* to the public and to Applicant to interpret the claims *as broadly as reasonably possible* during prosecution (see *In re Prater, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969)*). As shown in the rejection above, Haroun's system must store the interface identifiers corresponding to each of the devices for sending commands to the devices. Therefore, Haroun's teachings meet the limitations as broadly claimed by Applicant.

C. As to point (3), although "an internal device driver" is not specifically claimed, Haroun does teach communicating between an application and an internal device driver using the logical identifier (fig.1 and associated text on col.4).

D. As to point (4), the rejection above shows that Haroun does suggest the limitations as broadly claimed by the Applicant.

***Conclusion***

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hoffman et al. (U.S. 5815678) teaches "the IEEE1394 handle is a logical identifier used by the API to maintain the relationship between the application and adapter it is using"

35. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

36. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (703) 306 -5971. **After mid-October, 2004, the examiner can be reached at (571) 272-3765.** The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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